FOODBORNE DISEASE SURVEILLANCE IN NEW SOUTH WALES

GUEST EDITORIAL

Craig Dalton
Hunter Population Health

The major objectives of the surveillance of foodborne disease are to identify emerging threats to human health and to monitor prevention interventions. This issue of the NSW Public Health Bulletin examines current surveillance activities and identifies areas of development.

The article by Dalton highlights the critical role and responsibility that NSW has as a partner in national foodborne disease surveillance, and the likely benefits of recent investments in surveillance infrastructure. The article borrows from clinical audit practices, by citing variations in outbreak reporting rates by area health service as a potential indicator of quality assurance.

The article by Lee et al. uses a standard case-control study to associate undercooked shrimp dumplings in a yum cha meal with an outbreak of hepatitis A. In previous outbreaks, the cooling of cooked shrimp in contaminated river water has been suggested as a source of contamination. This investigation warns of two emerging threats that will require the vigilance of local, state, and international food safety agencies. At the international level, the investigation provides further evidence of the need to develop Hazard Analysis and Critical Control Points, to ensure that seafood cooked during its processing is not contaminated prior to its distribution. At the local level, it will be important to monitor the effectiveness of restaurant cooking in stacked steaming baskets to ensure even cooking of foods.

The current notifiable diseases surveillance system has been in place for over 10 years. The article by Persson and Bartlett describes a review of this system, to determine its effectiveness and guide further improvements. This article outlines the nature of the review, its recommendations, and the progress to date in addressing those recommendations.

continued on page 2
The article by Kirk describes some of the shortfalls in foodborne disease surveillance in Australia, and argues for greater integration of surveillance information on the microbial contamination of food, animal carriage, human illness, and other hazards. Kirk cites the benefits that have been realised, in some Scandinavian countries, through the integration of surveillance information.

The EpiReview by Neville and McAnulty analyses the surveillance of notified enteric diseases and reports of foodborne disease outbreaks in NSW, and identifies the need to further enhance outbreak reporting.

Together, these articles provide an overview of the epidemiological and surveillance framework for the promotion of food safety in NSW. A future issue of the NSW Public Health Bulletin will explore the evolution to a single agency responsible for ensuring safe food production, the NSW Food Authority.

REFERENCES

Craig Dalton
Hunter Public Health Unit
NSW Health has sole responsibility for the surveillance of foodborne disease in humans, through the receipt of notifications for a range of conditions that are predominantly or potentially foodborne in transmission. These conditions include: salmonellosis, listeriosis, shigellosis, typhoid, Verotoxin producing E. coli infection, cholera, hepatitis A, giardiasis, and cryptosporidiosis. In addition, outbreaks of foodborne disease affecting two or more people are notifiable. Surveillance methods used in NSW are described in detail in this issue of the NSW Public Health Bulletin by Neville and McAnulty. This article describes the evolution of, and recent investments in, foodborne disease surveillance and control in NSW, and discusses the opportunities to produce measurable enhancements to food safety from these investments.

THE EVOLUTION OF FOODBORNE DISEASE SURVEILLANCE IN NSW
In 1990, the Chief Food Inspector established a position of Foodborne Outbreak Investigation Coordinator in the Food Branch of the NSW Department of Health. The Foodborne Outbreak Investigation Coordinator was given authority to investigate outbreaks of foodborne disease, utilising the resources of the Food Branch. From this time, all foodborne outbreaks were reported by food inspectors employed by the NSW Department of Health, who were functionally located throughout the state. All reports were documented centrally by the Foodborne Outbreak Investigation Coordinator. These food inspectors, and the Department’s Food Branch, took the lead in the surveillance of foodborne disease.

In 1992, with the administrative transfer of food inspectors to public health units (PHUs), it became the responsibility of the PHUs to report outbreaks to the Foodborne Outbreak Investigation Coordinator in the Food Branch. An outbreak report summary form was developed to assist PHU staff to complete this requirement.

Initially, food inspectors conducted both the environmental and epidemiological investigation of outbreaks and followed up sporadic cases of salmonellosis. However, over the last 10 years, the role of food inspectors has focussed more on the environmental aspects of outbreak investigations, as epidemiologists—both in the PHUs and the NSW Department of Health—began taking the lead on the epidemiological aspects of those investigations. This evolution continues, with the transfer, in 2004, of all NSW Health food inspectors to a new single agency responsible for ensuring safe food production in NSW, which will be an enhancement and an expansion of the current SafeFood Production NSW (SafeFood). However, NSW Health will retain primary responsibility for the surveillance and investigation of illness due to foodborne disease.

The infrastructure for processing data describing foodborne disease has also evolved significantly over the last 10 years. Initially, each case involved in a foodborne disease outbreak was entered into the Infectious Disease Surveillance System (IDSS) database, which later became the Notifiable Diseases Database (NDD). However, each case was entered into the database without a standard set of summary outbreak information, such as the aetiological agent, food vehicle, or setting; therefore, these data could not be analysed to identify prevention opportunities. In 2002, PHUs adopted the OzFoodNet outbreak reporting form, which captured summary outbreak information. From October 2002, PHUs